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RELATION OF INDUSTRIAL ART TO MANUFACTURES*

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THERE has been a tendency during the last twenty-five years to exaggerate the value of hand labor, while condemning the use of machinery, in the manufacture of those articles which we group under the name of Industrial Arts. Taking the cue from William Morris and his associates, there has been much talk about the dignity of labor, and the disgrace that thinking man should become the slave of the machine which he has made. Yet, surely, from the use of mechanical labor-saving devices, with the resultant increase of the number and lowering of the cost of beautiful surroundings, we may confidently look for a general improvement in the popular attitude toward all that is best in the applied arts.

It is this word "art," perhaps, which obscures the subject. In everything we think worthy that name, and not alone in the fine arts, we look for evidences of spontaneous inspiration which seem incompatible with the use of machinery. And so they are; and so, to some degree at least, they must remain. Yet already even those most sacred precincts of the fine arts are being invaded with astonishing success by mechanics; already the statue, the painting, the musician's interpretation, are made liable to endless reproduction, with a degree of accuracy capable of yielding both pleasure and instruction; and who can foresee how far those processes, already so remarkable, will be further improved? The warm personal note will always be missed in any but direct human expression; but it is easily imaginable that improved mechanism will soon reproduce all the perfections, even of the fine arts, except that "unique" note. We are apt, sentimentally, to lay great stress upon the artistic value of this uniqueness or singularity of a beautiful object. This has even been given as one definition of a work of art, and our respect, as well as the commercial value, is undoubtedly increased by this quality. But, surely, beauty is intrinsic—in each of a thousand absolutely similar examples to the same degree as in one. Surely we need not destroy the nine hundred and ninety-nine in order to make the thousandth more really a work of art. Since mechanical reproductions even now have undeniable artistic beauty and educational potency, then I think we should more courageously accept the application of machinery to the industrial arts.

In the first place, we must remember that the industrial arts have two ends to fulfil—one of beauty and one of practical use—and that, after all, the utilitarian purpose is the fundamental one. Of all the products of the applied arts, jewelry seems most nearly frivolous; yet, with our present styles of dress and our present standards of table manners, we would greatly miss the products—more ornamentally disguised than other useful articles perhaps—of the jeweler's craft. Since, then, products of the industries are primarily utilitarian in purpose, it is necessary, from a practical point of view, that we should welcome methods of multiplication which make them in quantities, and at a cost which allows their usefulness to be employed by many more persons than could otherwise benefit from them.

However, in this place we are concerned rather with that other aim, which, working in concord with considerations of practical use—not in opposition to them—strives to mould the necessities of useful structure into forms of symmetry, and to bring out of its crudities ornamentation of pleasing fitness and grace. Consequently the main question before us is, whether the introduction of mechanical methods also brings this secondary, but highly important, purpose to its highest perfection and efficiency.

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In one way, probably not—it seems likely that the finest standard will always be taken from the hand-made article. To believe this we do not need to exalt those accidents of technique—surely no artistic addition—which stand for "the personal note" in the opinion of many who make a fetish of hand-craftsmanship. Nor do we need to forget that, for many operations, the inflexible and scientific precision of machinery is better than the hands of erratic mankind, or that the chief benefit derived from the labor of most amateur craftsmen is that their work has taught them to look with livelier and more intelligent eyes upon the work of more skilful and talented men. By the inherent conditions of manual creation—that is, by the painstaking slowness of the process, by the opportunities it affords for taking advantage of chance good qualities and minimizing accidental defects in the material, above all, by the fact that the object is constantly under the shaping guidance of that imagination or mentality with which we may never endow a machine—by these, the products of the artist's own hands must probably ever set the standards for machinery to emulate.

We must believe that hand-craftsmanship will always lead the way in the matter of artistic perfection, but mechanical methods will continually be improved to approximate each new effect, and in the end, I believe, they will prove of wider educational efficiency. Consequently, what we should desire is, not that these mechanical helpers whose work does not wholly satisfy us should be discarded, but that more pains should be taken to improve them. The chief causes of unfortunate artistic conditions in contemporary manufacture are weaknesses or deficiencies in the machinery, which can and should be overcome, and the too frequent unfamiliarity of the designer with the great and complex tool at his disposal.

Machinery is often not carefully enough prepared to approximate the subtle effects which have so much to do with the pleasurable character of handwork. Without any particular necessity it turns out hard effects where the designer would give soft ones, or blurred effects instead of crisp.

Perhaps, however, this is often merely a result of the other condition—the designer's common lack of intimate knowledge of his machine. He makes a design which seems to him good—such a design as he could execute by hand, and which he perhaps knows to a certain extent will be "practical," but which only in a general way takes into consideration the limitations and potentialities inherent in the machine which will reproduce his model or his drawing. Indeed, the designers for large manufacturing concerns rarely have had opportunity to make themselves thoroughly conversant with these important conditions. Such a state of affairs is irrational and far from being conducive to the best work.

Theoretical study in schools is not enough; the workman must know his tools. After all, the gradations are so subtle between the simplest hand tool used in antiquity and the most complex machinery of to-day that we can fix no border line. The elaborate machines now in use are simply combinations of many simple ones—they are the triumphant success of mankind's endeavor to force natural laws to do all that they may be made to do, leaving man leisure to make the most of that rational power which is his alone. They are a highly organized assembling of physical potencies, which are as proper for the artist's use as the physiological laws upon which they are founded—as legitimate as the acid used by the etcher and lithographer, and the chemical action counted upon by the potter. It is not the disuse of machinery which should be the desire of the artist, but rather the development of it to an ever higher state of responsiveness. While man remains the master of the machine it is a labor-saving tool of the n^{th} power of efficiency.

In spite of the wonderful advances already made in machine-design, however, while it does many things better than hand-made tools could ever do, on the other hand, it is unable to do certain things as well as the implement which is under the constant guidance of the thoughtful artist. So, while there should be constant endeavor to decrease these inabilities, the designer, frankly facing the question, should make himself perfectly conversant with both the advantages and disadvantages of the great instrument which is wholly at his service even though he does not himself guide it, and should make his designs accordingly. Then would man truly be the master of his machine, which he is not always at present. Such procedure would be wholly in line with artistic precedent—for the bookbinders, the cabinet-makers, the tapestry designers of the great age of crafts all were influenced very evidently, not simply by theories of design and the uses to which their product would be put, but equally by the character of the material at hand, and by the tools which they had succeeded in evolving. And in our own generation this frank recognition of the peculiar conditions of steel construction has brought forth a new style of architecture.

The introduction of mechanical methods of reproduction into the domain of the industrial arts, then, I consider to be not only perfectly legitimate but also, in many ways, pregnant with new and valuable suggestions for the designer's artistic endeavors. Yet still more valuable, indeed, almost beyond price, is the great educational and elevating stimulus exerted by this increasing use of machinery, making possible the introduction of achievements of the finest artistic ability into the homes of all classes, and thus exerting an educational influence deeper and more direct than pedagogic instruction possibly could exert.

In the days of universal hand-labor, the works of a master designer, executed by himself or his pupils, were so costly by reason of their uniqueness as well as of the time spent upon them, that only the wealthy could possess them. The masses depended for their furniture, their textiles, their everything, upon what we must confess were the rude and unesthetic productions of unskilled workmen. Even the industrial arts were aristocratic. Machinery has made them essentially democratic. Natural sentiment for the direct product of the artist's hand, the general love of preciosity, and the sheer monetary value of objects which are unique, all these will combine to maintain a demand for hand-labored objects; but this need not make us forget that, since the elaboration of machinery, more or less perfect expressions of the intentions of the finest craft-artists of the day are being produced in quantities and at a price which brings them within the reach of everyone. In the humblest and most remote places we may see articles bearing the stamp of the highest genius—articles such as could be possessed by comparatively few, if the means used had been the simple tools of our forefathers, instead of the wonderfully complex structures which man's ingenuity has forced electricity, or vapor, or the rivers, to operate for him.

And who can compute the force and profundity of the subtle influence these send broadcast through the world, since beyond its intrinsic beauty every well-designed work of art is of benefit by its example, and its elevating effect on those who see it. To create the first demand for better productions is the task of education; indeed, the whole situation rests primarily upon the necessity of educating the public to demand better things, and the designers to produce that finer work which manufacturers will consequently be encouraged or forced to turn out. Dealers of artistic aims, such as the head of one of the best known manufacturing concerns in the country, who wrote me lately, may at present be forced to sell their better patterns by calling them "novelties";

yet once the leavening influence of examples of good art has been set working among the masses they must respond by a growth of taste.

This cumulative result of a wider dissemination of good art can hardly be doubted; indeed, already the effects are showing plainly. Theories which were considered revolutionary twenty years ago, or even five years ago, are now accepted as commonplaces by the majority. Nor is it far-fetched to attribute the growing appreciation of simplicity in decoration to the better quality of the materials within the reach of the people. Less than three years ago, when I criticized the stock of the manufacturer to whom I have already referred, he explained that he must carry a preponderance of inartistic productions to make possible the luxury of offering the better things. Very recently, however, he wrote me: "A great improvement lately has been made in the styles and lines of furniture—more now than ever in reproductions, and commercial furniture is following suit. The manufacturers have, I think, now reached a point where they cater to the best artistic ideas of the people. People demand it." And as we have already said that the hand-made article will probably always set the highest standard, it is worth while to emphasize the fact that appreciation of the finer machine-productions in no way overshadows, but rather increases, the demand for the more expensive products of hand-labor. For instance, a very few years ago it would have been inconceivable that the proprietors of a hotel should have considered the decoration of a long gallery with hand-made tapestries as a legitimate expenditure and a paying advertisement, but in a hotel recently completed in New York approximately forty dollars a square foot was appropriated for this purpose.

One splendid feature of this improvement in taste is, that it cannot be lost. Of course, those who have been led to buy good things simply because they are the fashion may be led another time to buy bad things, when an unprincipled manufacturer endeavors to encourage the market's activity by introducing some change merely for the sake of variety. Yet, after all, bad design which gains wide acceptance is generally found to be only the debasement of good design, between which bad and good, popular judgment has not yet learned fully to discriminate. Our endeavor should be to educate the manufacturer and the workman, as well as the public which is the market. Fortunately, bad art can not proselytize; but every really good production has filled some educational mission which can not be destroyed, and every example of good design creates a demand for more, to replace the tasteless objects surrounding it. Even though its mission is as yet only begun, we can not be too grateful for the machinery which makes it possible for everyone to possess practical objects of beauty!

A MURAL DECORATION BY C. Y. TURNER

ON the opposite page will be found a reproduction of a mural painting recently executed by Mr. Charles Yardsley Turner for the Cuyahoga County Court House of Cleveland, Ohio. It is a large panel 28 feet long by 13 feet high and fills a space at the end of the court room 20 feet above the floor. The subject is historic—the meeting of Captain Robert Rogers of the famous "Roger Rangers" and the Indian Chief Pontiac, which took place at a point on the Cuyahoga Creek adjacent to or now included in the present city of Cleveland. Each of the figures is more than life size. The coloring is rich and strong, the manner of treatment broad, but at the same time deliberate. For the opposite end of the same hall, to fill an identical space, Mr. Turner has painted "The Trial of Captain John Smith," supposedly the first trial by jury held in this country.